## **Setting Speed Limits**

Speed limits are determined through several factors, including:

## 1. Prevailing vehicle speeds

- a. 85th percentile speed
- b. Average vehicle speed
- C. Pace vehicle speed

#### 2. Site Characteristics

- a. Design speed
- b. Measure physical features
  - 1. Comfortable speeds for curves
  - 2. Spacing of intersections and driveways
  - 3. Roadside businesses and other traffic generators
- c. Roadway surface characteristics and conditions
  - 1. Slipperiness of the pavement
  - 2. Roughness of the pavement
  - 3. Presence of dips and bumps
  - 3. Presence and width of medians

## 3. Accident Experience

#### 4. Traffic Characteristics and Control

- a. Traffic volumes
- b. Parking and loading vehicles
- c. Commercial vehicles
- d. Turn movements and control
- e. Traffic signals and other traffic control devices that affect or are affected by vehicle speeds

## **Speeding Myths**

 All motorists exceed the posted speed limit by 5 to 10 mph and the only way to reduce speeding is to reduce the speed limit.
 FALSE! In reality, 85% of motorists drive within properlyposted speed limits.



- Excessive speeding is the major cause of accidents. FALSE! In reality, the problem is more variations of speeds in the traffic stream.
- Low speed limits are the best. FALSE! In reality, unreasonably low speed limits result in a greater number of violations and a disrespect of other posted speed limits that are reasonable.
- Lower speed limits save gas. FALSE! Research has shown that the 55-mph National Maximum Speed Limit, which was enacted specifically to save gas, had practically no impact on fuel consumption. Most fuel is used to accelerate to a given speed. Speed limits based on actual travel speeds promote better traffic flow and reduce the amount of braking and accelerating on our roads.



Department of Public Works Engineering Division 455 W Main, 7th Floor Phone: 316-268-4501 Fax: (316) 268-4114 http://www.wichita.gov

# What Can I Do: Speeders in my Neighborhood!



## **Traffic Engineering**

Engineering Division
Department of Public Works
455 W Main, 7th Floor
Wichita, Kansas 67202
http://www.wichita.gov

Tel: 316-268-4501

## Why Do We Even Have Speed Limits?

Speed limits have four purposes. The primary purpose of speed limits is to enhance safety by reducing risks imposed by drivers speed choices. The intent is to reduce disparities in speeds and reduce the potential for vehicle conflicts. A uniform speed of vehicles in a traffic flow results in the safest operation. The posted speed limits can keep the traffic flowing smoothly—provided the majority of drivers find the speed limits reasonable.

A secondary function of speed limits is to provide the basis for enforcement and sanctions for those who drive at speeds excessive for conditions and endanger others. Generally speaking, traffic laws that reflect the behavior of the majority of motorists are



found to be successful, while laws that arbitrarily restrict the majority of motorists encourage violations, lack public support, and usually fail to bring about desirable changes in driver behavior.

Third, speed limits also give the motorist an idea of a reasonable speed to drive in an unfamiliar loca-

tion. Decreasing speed limits in areas that have had a history of accidents can protect a driver who is unaware of latent dangers.

Finally, valid speed limits furnish enforcement personnel with a guide as to what is an appropriate speed for a segment of road so that enforcement actions may be consistent and fair. Enforcement improves the overall credibility of all traffic control devices.

#### Why Requested a Speed Limit Change?

Speed limits are often requested for perceived increased safety, decreases in accidents, the protection of children, and for roadway conditions.

Generally, citizens request speed limits for their neighborhood streets that are lower than they consider reasonable in other residential neighborhoods. Usually, the greatest violators of school limits are parents taking their children too and from school.



## **How Do People Choose How Fast to Drive?**

Motorists usually adjust their speed according to the conditions of the roadway, such as traffic density, weather, et cetera.

## **Effects of Unreasonably Low Speed Limits**

An unrealistic speed limit that is "too low" will:

- A) Make the behavior of the majority unlawful;
- B) If enforced, unreasonably low speed limits cause antagonism toward enforcement personnel and traffic laws in general;
- C) Create a bad image of the community for visitors and tourists;
- D) Result in speed differentials in the traffic flow.

# Why Not Install Stop Signs, Traffic Signals, Speed Bumps, or Some Other Device to Reduce Speeds?

Traffic control devices are designed and installed to solve a particular problem. When they are misused for speed control purposes, they are ineffective and may create a hazard. For example:

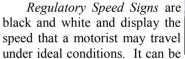
Stop signs are designed to control traffic at busy intersections. When used to reduce speed, motorists "roll" through them, then increase their speed between such signs.

*Traffic signals* are designed to control traffic at busy intersections or to reduce broadside crashes. When misused, they may cause drivers to speed up to "beat the light" and may increase crashes.

Speed bumps are hazardous to all vehicles especially emergency vehicles, bicy-

clists, motorcyclists, school buses and snow plows.

# All Speed Limit Signs are the Same . . .





a statutory value or else it must be authorized by the City.

Advisory Speed Signs are black and yellow and are used to advise motorists of a comfortable speed to navigate certain situations. It is used with a warning sign. For example, when traveling on a winding road, the curve warning sign will be used with an advisory speed sign.

## Want to Change a Speed Limit?



If, after reviewing this pamphlet, your neighborhood believes the City should consider the modification of a speed limit—either raising or lowering—please send a letter outlining your request to the address on the back of this brochure.